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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/564,292      | 01/10/2006  | Kui Yong Lim         | DE 030244           | 6997             |

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS  
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BRIARCLIFF MANOR, NY 10510

EXAMINER

BAISA, JOSELITO SASIS

ART UNIT PAPER NUMBER

2832

| SHORTENED STATUTORY PERIOD OF RESPONSE | MAIL DATE  | DELIVERY MODE |
|--|------------|---------------|
| 3 MONTHS                               | 03/12/2007 | PAPER         |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/564,292

Applicant(s)

LIM ET AL.

Examiner

Joselito Baisa

Art Unit

2832

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☒ Claim(s) 1-10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 1/10/2006
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3 and 5-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Takagi et al. [20030098507] in view of Yamada et al. [5202653].

Takagi discloses an inductive system comprising a first part coil 50 comprising a number of turns at least one turn spacing; and a second part in the form of a non-printed coil 33; which coil 50 and which non-printed coil 33 are coupled serially [Page 6, Paragraph 88, Figure 13].

Regarding claim 2, Takagi discloses the non-printed coil 33 comprises an air coil comprising a further number of turns defined by at least one wire diameter and at least one coil diameter [Page 6, Paragraph 88, Figure 13].

Regarding claim 3, Takagi discloses a total inductance of the inductive-system is substantially equal to an inductance of the coil 50 plus an inductance of the air coil 33 plus a mutual inductance Page 6, Paragraph 88, Figure 13].

Regarding claim 5, Takagi discloses the number of turns are further defined by a diameter of a center path (R1) and a turning direction, with the further number of turns being further defined by a turning orientation [Page 6, Paragraph 88, Figure 13].

Regarding claim 6, Takagi discloses one end of the non-printed coil 33 is coupled to a center end of the coil 50, with the other end of the non-printed coil 33 and an outer end of the coil 50 constituting ends of the inductive-system [Page 6, Paragraph 88, Figure 13].

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Regarding claim 7, Takagi discloses the coil 50 is on an inner or an outer layer of a printed circuit board 51 [Page 6, Paragraph 88, Figure 13].

Regarding claim 8, Takagi discloses printed circuit board 51 which comprises an inductive-system comprising a first part in the form of a coil 50 comprising a number of turns and at least one turn spacing; and a second part in the form of a non-printed coil which printed coil (11,21) and which non-printed coil 33 are coupled serially, and which coil is printed on an inner or outer layer of the printed circuit board 51.

Regarding claim 9, Takagi discloses a filter 30 with an inductive-system comprising a first part in the form of a coil 50 comprising a number of turns defined by at least one track width and at least one turn spacing; and a second part in the form of a non-printed coil 33; which coil 50 and which non-printed coil 33 are coupled serially [Page 6, Paragraph 88, Figure 13].

Takagi disclose the instant claimed invention discussed above except for the first part coil is a printed coil defined by at least one track width.

Yamada discloses a first part coil is a printed coil defined by at least one track width [Col. 5, Lines 6-11, Figure 3].

It would have been obvious to one having ordinary skill in the art at the time of the invention to use first part coil is a printed coil defined by at least one track width as taught by Yamada to the inductive system of Takagi.

The motivation would have been to prevent an increase in the size of the filter as a whole [Col. 2, Lines 11-12].

With respect to claim 10, the claims are method counterpart of structure of claim 1 and method steps therefore are inherent for manufacturing an inductive system comprising a first part in the form of a printed coil and a second part in the form of a non-printed coil.

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Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Takagi in view of Yamada <sup>1-3 and 5-10</sup> as applied to claim ~~8~~ above, and further in view of Ma et al. [6573822].

Takagi further discloses selecting a length of the air coil 33, with the mutual inductance increasing with the length of the air coil 33 until a maximum overlapping area between the coil 50 and the air coil 33 has been reached [Page 6, Paragraph 88, Figure 13].

Takagi in view of Yamada disclose the instant claimed invention discussed above except for the value of the mutual inductance has been chosen by combining a right turn coil or a left turn coil with a clockwise coil or an anti-clockwise coil.

Ma discloses a combination a right turn coil or a left turn coil with a clockwise coil or an anti-clockwise coil in choosing the value of the mutual inductance [Col. 6, Lines 27-54, Figures 18 and 19].

It would have been obvious to one having ordinary skill in the art at the time of the invention to combine a right turn coil or a left turn coil with a clockwise coil or an anti-clockwise coil in choosing the value of the mutual inductance as taught by Ma et al. to the structure of Takagi in view of Yamada.

The motivation would have been for the desired inductance to be met [Col. 1, Lines 10-22].

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joselito Baisa whose telephone number is (571) 272-7132. The examiner can normally be reached on M-F 5:30 am to 2:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Elvin Enad can be reached on (571) 272-1990. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Joselito Baisa  
Examiner  
Art Unit 2832

jsb



Tu Ba Hoang  
Primary Examiner